



# **Air Quality and the Salton Sea**

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**Oversight Hearing on the Salton Sea**  
**California State Assembly Water, Parks & Wildlife Committee**  
**February 22, 2013 - Mecca, CA**

# South Coast Basin



**Population..... 17 million**  
(about half of State's population)  
**Status..... Biggest air quality challenges**  
**in the nation**

# Potential Salton Sea PM Emissions

- Fugitive Dust
  - PM10 and, to a lesser extent, PM2.5
  - Receding shoreline may expose more emissive playa
  - Possible toxic components in dust
- Hydrogen Sulfide
  - September, 2012 event experienced throughout Southern California
  - Local events may be more frequent
- Secondary emissions from mitigation strategies
  - Construction – construction equipment, worker trips, etc.
  - Operation – pumps, IC engines, etc.

# Fugitive Dust – Exposed Playa and Saltation



Must identify and implement early mitigation strategies to avoid another Owens Lake situation

# Owens Lake Dust Storm



# Over 250 odor complaints received by AQMD September 8 -12, 2012

## Odor descriptions (in descending order)

Sulfur

Rotten eggs

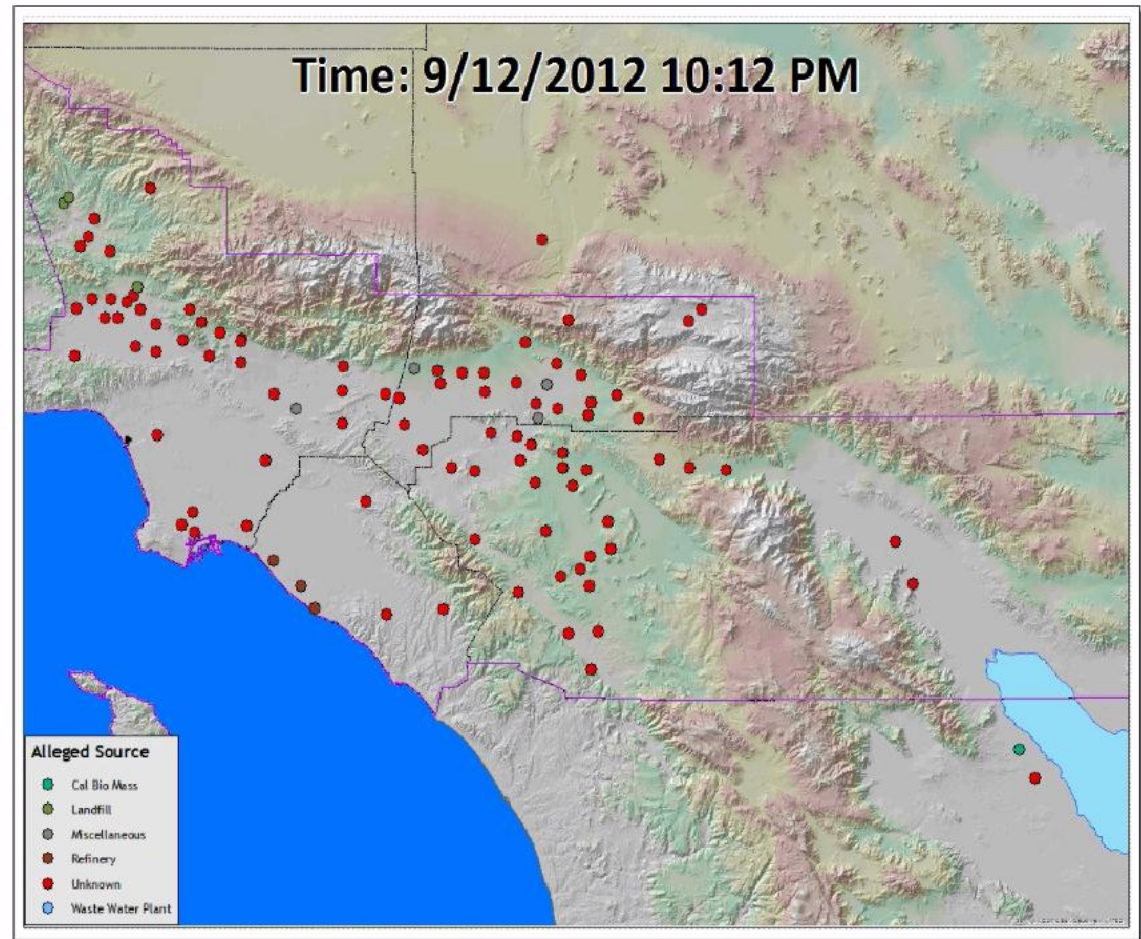
Animal/human waste material

Trash/garbage/landfill or natural gas/composting

Foul/rotten

Greasy/rancid/putrid /dead animal

Pungent/acrid/chemical/burnt



# Los Angeles Times

LOCAL U.S. WORLD **BUSINESS** SPORTS ENTERTAINMENT HEALTH LIVING TRAVEL OPINION DEALS

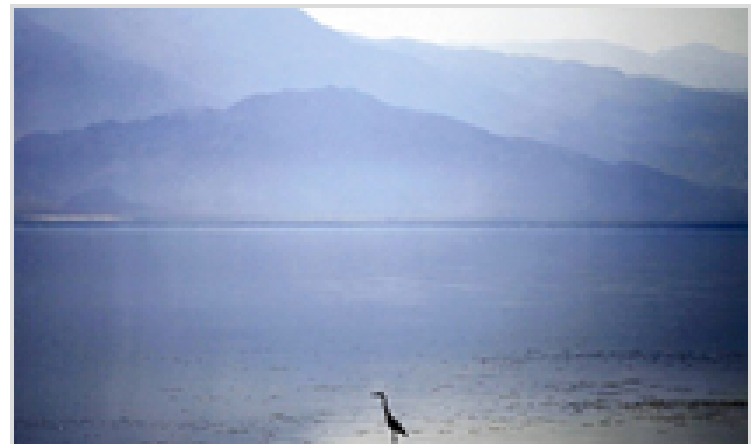
## Rotten smell reeks havoc across Southern California

*A massive fish die-off in the Salton Sea is the prime suspect in a rotten smell that swept the region, but experts can't recall a bad odor ever traveling so far.*

**September 10, 2012** | By Hector Becerra, Phil Willon and Andrew Blankstein, Los Angeles Times

When the rotten egg smell wafted into the Santa Clarita United Methodist Church in Saugus on Monday morning, Kathy Gray thought the church's sewer pipe had burst.

More than 70 miles to the east, steelworker Chris Tatum's nostrils got the punch in Riverside. He assumed a brush fire had just broken out.

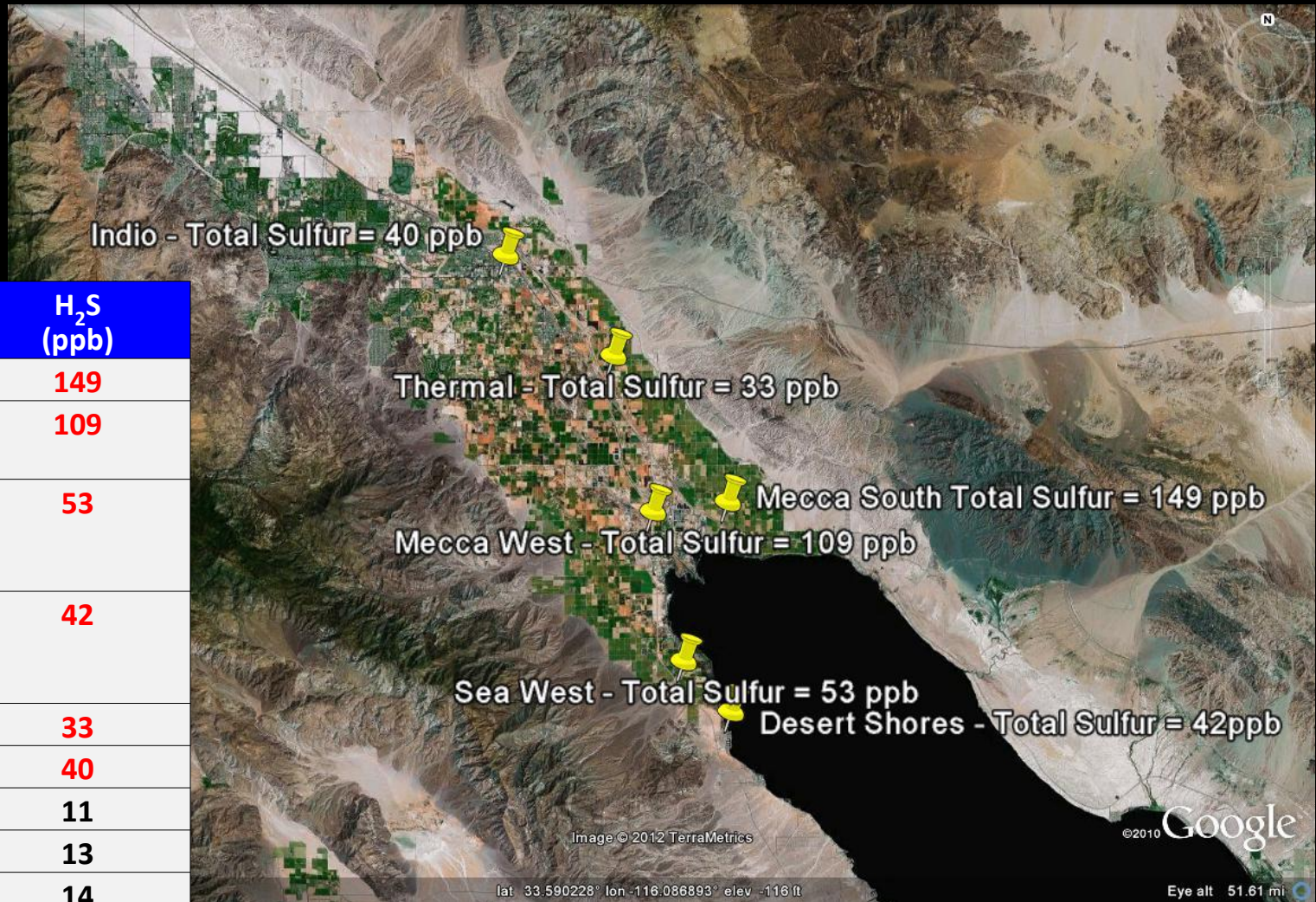


A heron feeds in the Salton Sea earlier this year. Officials say 40-mph winds... (Luis Sinco, Los Angeles...)



# Sulfur Measurements

Location	H <sub>2</sub> S (ppb)
Mecca South	149
Mecca West	109
Sea West (West of Salton Sea)	53
Desert Shores (West of Salton Sea)	42
Thermal	33
Indio	40
Riverside	11
Redlands	13
Cherry Valley	14
Beaumont	Less than 2





# Recommended Actions to Address Air Quality impacts of the Salton Sea

- Fugitive Dust
  - Study potential for greater emissions
  - Identify and implement effective dust control strategies
  - Continue PM monitoring
  - Analyze dust for toxic components
- Hydrogen Sulfide
  - Deploy monitors for real-time, rapid detection (underway)
  - Inform affected communities of source and risk
- Control emissions from mitigation strategies
  - Zero or very low emission equipment